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ORIGINAL ARTICLES.

Spinal Irritation.

By DR. O. C. M'NARY, M. D.
Surgeon National Soldiers' Home, Leavenworth, Kas.

Read before the Eastern Kansas Medical Society in Leavworth, July 10, 1894.

It is with a great deal of diffidence that I undertake to address you to-night on the subject of spinal irritation. Many authors, even the specialists on nervous diseases, pass it over with but a few rather unsatisfactory lines; and many account it a comparatively rare disease, confined almost exclusively to women; while others do not consider it as a distinct disease. All this I believe to be a mistake, and a visit to our National Military Home, and examination of numbers of cases there, will show that it is not *rare*, and that many *men*, especially those of middle life, are afflicted with this comparatively misunderstood and generally unrecognized disease. When I say misunderstood and unrecognized, I mean by the general practitioner. The train of symptoms accompanying the disease are as varied and remote as those said to result from a phimosis, many being very misleading in character and attributed to other causes.

The point I wish to make in this paper is simply to call attention to this disease, to assure you that it is a disease, and to urge a thorough examination of the spine when any of the varied symptoms enumerated are found.

Men come to the Soldiers' Home with medical certificates from physicians all over this western country, setting forth diseases of all kinds, most notably, diseases of the heart, lungs and liver, that, had the physician examined the spine, he would have found were simply cases of spinal irritation.

The Brothers Griffin, in the London *Medical and Physical Journal*, 1829, were the first to write any extended description of the disease, although Dr. C. Brown, of Glasgow, Scotland, wrote a paper on the subject and named the disease a year before. The Griffins supposed the disease to consist primarily in an irritation of the sympathetic ganglia. In later years other observers considered the disease to be due to an anaemic condition of the cord.

Flint regarded it for a number of years as a purely functional disease of the nervous system, and afterward that the claim of spinal irritation to a place in the nosology was not well grounded, but that the phenomena grouped under the name of spinal irritation had other pathological connections entirely.

Ranney questions the propriety of regarding it as a specific form of disease, and considers the phenomena classed under this head as very frequently nothing more than manifestations of the hysterical or neurasthenic states, as also does Skey.

Dr. V. P. Gibney, before the American Neurological Association in 1877, advanced the view that "spinal irritation was in a majority of cases a meningeal affection, and was usually the result of an injury of some kind."

Allan McLane Hamilton says he is strongly inclined to accept Dr. Gibney's explanation, but not in its entirety. That also he is "inclined to adopt the views of the Griffins and consider spinal irritation to be a condition due to a primary perversion of the functions of the sympathetic system, or to a secondary ischæmic state, and that in some parts of the cord both abnormalities exist," etc.

Hammond (Wm. A.) specifically locates the disease in the posterior columns of the cord, and attributes it to spinal anæmia of those columns. His treatise on the subject is quite exhaustive and very instructive, and my experience and study of the disease, which has been entirely clinical, agrees with his more nearly than with any other author I have consulted.

Doctors disagree.

The symptoms of the disease are many and varied. A symptom that is always present, is pathognomonic, and the most often overlooked in searching for the cause of different other symptoms, is spinal tenderness. It may or may not be complained of by the patient. More often not; it must be sought for by the physician. Firm pressure with the thumb over the intervertebral spaces, catching hold of a spinous process and attempting to shake it, will cause varied degrees of pain, from a slight uneasiness to excruciating and lancinating pains. Pains that (if the disease is seated in the dorsal region) will shoot around the body in the course of the intercostal nerves, and be described by some patients as feeling like a knife thrust entirely through the body from the rear to the front. In other cases the pain will be located by the patient, not in the spine, but at some spot on the front or side of the body. In other cases the pain will be located at both front and rear, or if the tender spot is low down, even into the sciatic or crural nerve.

These tender spots may be in the cervical dorsal or lumbar region, or along the full length of the spine, but are most frequently found in the dorsal region. There may be a single spot or there may be many. The skin itself may even be hyperasthetic, and I have seen a patient wince at the pressure of a camel's hair pencil. Other symptoms, and these are the ones most complained of by the patient, may be found in regions remote from the spine, their seat and character depending upon the part of the spinal cord affected. If the disease has its seat in the cervical region, we may have diplopia, amaurosis, photophobia, toothache, faceache, ringing in the ears, vertigo, nausea, hallucinations, cervico-brachial neuralgia.

If in the dorsal region, intercostal neuralgia, gastralgia, dyspepsia, nausea and vomiting, loss of appetite and loathing of food, palpitation of the heart, irregular action of the heart, dyspnœa, asthma.

If in the lumbar region, urinary troubles, neuralgia of the rectum, convulsive movements of the legs, partial paraplegia, pains in the course of the crural or sciatic nerve, and to crown all, we may have hysteria.

The shaking of the vertebra, firm pressure, or percusion over the seat of the disease, will aggravate and accent these eccentric symptoms, in some cases, to a very marked degree, thus at once clearing up the diagnosis.

The cause cannot always be ascertained, but I find it generally to be the result of an injury to the spine; a strain or a blow. In a few cases I have attributed it to sexual excesses, and in a still less number of cases to anxiety or grief.

The treatment should be rest, with nerve tonics and counter irritation.

Mental and physical labor should be interdicted for a time, and only enough light, outdoor exercise taken to ensure good circulation and oxygenation of the blood.

The recumbent posture should be recommended when not exercising; it will give great relief. Light amusements and light, interesting literature should be indulged in, and the patient should be encouraged and buoyed up mentally by his physician.

Of all the nervous tonics I have found the phosphide of zinc and nux vomica the best adapted to the disease. I generally administer them in the form of a pill or tablet containing 1-10 gr. of phosphide and ¼ gr. of ext. nux vomica. For counter irritation I invariably employ the blister. I have found leeching and cupping, as recommended by some authors, to be little better than nothing. The flying blister (about one inch square) gives the best results; one here to-day, another there to-morrow, moving them about, over and in the neighborhood of the tender spot, never permitting one to heal before applying another. In addition, electricity has been employed with

success in some cases, especially those with hysterical symptoms. The imagination, no doubt, adding something to the benefits actually obtained from the current. I prefer a descending current from a faradic battery. The seances being of short duration and every second day.

The prognosis in most cases is good. I have invariably given my cases great relief, and where a continuance of the treatment could be had, I have with but three or four exceptional cases, cured them.

Look into the matter.

The Pessary in Retroversions.

Maryland Medical Journal.

Dr. F. H. Davenport has contributed an article to the *American Journal of Obstetrics* on the ultimate results of treatment of backward displacements of the uterus by the pessary, with especial reference to the Alexander-Adams operation, and he sums up the matter as follows:

1. In cases of uncomplicated retroversion or retroflexion of the uterus the choice of treatment lies between shortening the round ligaments and the wearing of a pessary.

2. A cure, either anatomical and symptomatic, symptomatic alone, may be confidently expected from the use of a pessary in about twenty-five per cent. of all cases.

3. Where a cure is effected it is usually within a year or a year and a half after the beginning of treatment.

4. A large proportion of those not cured can wear a pessary without discomfort and do not wish an operation.

2. The operation for shortening the round ligaments should be limited to those cases where a pessary cannot be worn, to those who prefer it to wearing a support for years, to cases where vaginal treatment is inappropriate, and as supplementary to other operations.

Two cases of hysterical deafness are reported by Cartaz.

The Abuse of Milk in the Treatment of Albuminuria.

The Cincinnati Lancet-Clinic.

Lecorche and Talaman (*Bl. f. klin. Hydrotherapie*, December, 1893) condemn the indiscriminate use of milk alone as the diet of those who suffer from albuminuria. They fully recognize and admit the advantages to be derived from an exclusively milk diet, but they maintain that each must be judged on its individual merits, just as with every diet or medicament. They contest the view that milk of itself will provide sufficient nourishment for an adult; the rules that apply to the growing person cannot be transferred in full to the case of the fully grown. To preserve the balance of tissue change, an adult would require to take about four litres (about sexen pints) of milk per diem, a quantity which, as experience shows, can rarely be taken, and then only at the risk of digestive disturbances which make the expected benefits quite illusory.

It is, therefore, going upon a wrong principle to say that every case of albuminuria ought to be sustained on a diet of milk only. Besides, the hope that by this diet albumen can be made to disappear from the urine is altogether vain, at least such is the experience of the writers after a long and persevering research. They believe a strict "milk regime" is justifiable only when an excessive diuresis is indicated; that is, above all, in acute nephritis, and in the second place, in acute exacerbations of chronic inflammatory disease of the kidney.

It does not matter whether these exacerbations manifest themselves by hemorrhage, albuminuria, or uremia. But this mode of treatment must not be carried too far; after a week or two the ordinary diet must be resumed, and the medical attendant must have recourse to other methods in his struggle with the primary disease.

DR. SOLIS COHEN believes that the great majority of consumptives can be cured.

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W. E. McVEY, B.S., M.D., Managing Editor.

Collaborators:
J. E. MINNEY, A.M., M.D., Topeka, Kas.
S. G. STEWART, M.D., Topeka, Kas.
J. C. McCLINTOCK, A.M., M.D., Topeka, Kas.
M. B. WARD, A.M., M.D., Topeka, Kas.

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Anæmic and Hyperæmic Headache.

In anæmic headache there is not sufficient blood in the cranial cavity. This condition is found in persons who are debilitated, and especially in young girls who are feeble or choretic. The muscular system is weakened in this condition, and the heart muscle becomes flaccid and cannot perform its function properly, and the brain suffers from lack of blood pumped into it. These cases are better when lying down, and particularly in the after part of the night, when the circulation has been equalized. They lack, also, in quality and quantity of blood. The heart muscle should be toned up with small doses of alcohol, from a half to a teaspoonful every three or four hours. Milk, eggs, tender beefsteak, meat juices, cream, codliver oil, and all kinds of food that is nutritious and tolerated by the stomach, and shows that it is being assimilated, should be given. If there is no particular desire for food the patient should take it at regular intervals more religiously than the medicine. At regular intervals, so as not to interfere with stomach digestion, plenty of potable water should be taken. One quart in the twenty-four hours should be taken in addition to the fluid food unless there is some contra-indication to its use. By this means the quantity of the fluids of the body is increased, the volume of blood is greater, and all irritating substances are dissolved and sewered from the system.

Hyperæmic or congestive headaches may be produced from the same cause as anæmic headaches, such as excessive sexualism, vasomotor insufficiency, etc., but the opposite condition is present. There is an excessive amount of blood in the brain. The face is flushed, the capillaries are distended, the head is hot, the person is irritable, and the head aches worse when the patient is in the recumbent position. Relief is given by lessening the blood in the brain. In plethoric subjects free blood-letting is the quick way of giving relief, and probably the best. Pressure on the common carotids is effective, but not at all practicable. But it is practicable in plethora to remove from a pint to a quart of blood quickly, and it is scientific and common sense treatment. Electro compression is advocated by some.

The electrodes are pressed directly against the arteries at right angles to them, and the hand placed to the back of the neck for counter-pressure and to support the head. The strength of the current is gauged by the effect, and can only be determined empirically. By this mode of treatment, Corning says, we accomplish a three-fold end:

1. Diminution of the amount and pressure of the cortical blood-stream.

2. Contraction of the cerebral capillaries.

3. Reduction of the intensity of the heart's action (when currents of considerable strength are employed).

Corning claims excellent results by this mode of treatment.

Cold applications to the head and hot ap-

plications to the feet and legs are commonly employed with good temporary results. Blood-letting should not be practiced in feeble or anæmic patients.

The inhalation of chloroform, theoretically, is an excellent temporary agent, but to persons subject to congestive headache it would soon lead to the habit, and hence should be used with discrimination.

"Venesection," Corning says, "to which resort was had by the older physicians in congestive and other forms of headache, can only meet with unqualified condemnation by the modern neuro-pathologist as at once a supererogatory and even dangerous procedure. Local depletion by epistaxis—the most direct mode of affecting the cerebral circulation by blood-letting—or compression of the carotids by means of appropriately constructed instruments, are certainly far more direct in their effects than general depletion, and at the same time quite devoid of danger or disagreeable consequences of any kind." The older physicians were probably wrong in bleeding for all forms of headache, but not in the congestive form in plethoric subjects. From our experience with epistaxis, we would much prefer to open a vein at a point where we can control it than in the nose.

The modern neuro-pathologist, like other modern specialists, condemns methods of treatment, often in a wholesale manner, from lack of a broad-gauge conception of the subject as a whole. By hobby-riding and specialism the profession is directed into new fields and unexplored regions, but the profession at large critically proves the advance in medicine. The mistake in the practice of medicine in all ages, past, present, and future, has been, is, and will be, in differentiating. Blood-letting is necessary in a certain class of cases in headache, but not in all headaches. Cold and hot applications in their turn are indicated, but not in every form will the one or the other meet the indication. Solid food cannot be properly masticated, taken into the system and appropriated by a man who is famished for water. We are persuaded that blood-letting is good practice in its place, and that it has a place. That many methods of treatment are condemned because the physician used them improperly or when they were not indicated, and because of his lack of discrimination bad results followed and the agent was condemned.

The wrong use of a good thing results in injury. A man makes himself a dyspeptic, he is not born.

A Business Proposition.

The medical profession is among the first to suffer in a financial crisis. The doctor bill is the last to be paid. The doctor almost necessarily does a trust or book business. His accounts run from a few days to eternity. From the time he enters a medical college until he receives the degree of M.D., his time and energy are given to learning the human body in health and disease. He spends no time in learning financial methods, and who is good or who is bad. When he sees a diseased condition in the human body in saint or sinner, he names it. The relief of suffering is his shibboleth. In case of injury he does not stop to inquire, "Is this a saint or a sinner? a philanthropist or an assassin?" but here is suffering and I will relieve it. He labors and watches and serves until he is truly a servant. He feels that it is his duty to do so. It is a part of his life. He becomes so engrossed in his work that if he does not forget self he has a hesitancy in asking for a recompense—for pay for his work. A number of physicians have told me it is the hardest task of all to ask their patients for their fees, and especially when they knew the financial condition of the patient. This subject is forced upon us at the present time. The finances of the people are in a deplorable condition, and who suffers more on this account than the doctor? There is plenty of money, but not in general circulation. We admit that doctors are not known generally as financiers. This is not because of their lack of ability, but because their energy has been expended in other direc-

tions, and they have permitted others to do the financial work of the world. What has been the result? These financiers have done the work and to their own interest. We would have done the same, but where we are at fault is in blindly and implicitly submitting, and supporting measures advocated by these financiers without inquiring into and examining them for ourselves. We do not take any man's *ipsi dixit* in questions in our profession, and why this blind belief in these financial questions, which are of as much vital importance to us as to the financier or statesman. There is something wrong in the financial world for professional and laboring men generally. There is plenty of money, but it is held by comparatively few persons. It is true that all of us have been at fault in a measure. We have not kept within our means in many instances. Various courses have contributed to the present money stringency. But it seems to an outsider that there is a basic fault. Just what that is, is not clear to our mind, but it has assumed the question form as follows, viz.: Why was silver demonetized in the United States? Who asked for its demonetization? What was the effect of its demonetization on the debtor class of the country? What was the effect on the creditor? Did it not change the money volume of the country? In what way? and what was the effect upon the financial world? Will some financial medical editor or doctor give us some light on this subject?

Idiosyncrasy.

THE term idiosyncrasy is used to express our ignorance of a cause. It is a nice, big, fat word, and has filled "a long felt want" for many generations. It is not a harsh, distressing and humiliating word like "I don't know." It is more soothing to the auditory nerve of the physician and creates a holy reverence for him in the mind of his patient. It is an expressive word, covering a great deal, like a blanket insurance policy. It covers what is and what is not in the mind of the possessor. It is "diathesis brought to point," "individuality run mad." Hutchinson thinks idiosyncrasy should not be applied to acquired peculiarities, but solely to those that are congenital.

Hutchinson defines temperament as "being the sum of the physical peculiarities of an individual, exclusive of all definite tendencies to disease. If a more distinct proclivity, it is called a diathesis; a diathesis as a bodily condition favoring the development of some certain disease throughout the whole life; some diathesis being inherited and others acquired. The term idiosyncrasy is applicable to any definite peculiarity of organization of which the consequences may occur unexpectedly and inexplicably."

The idiosyncrasy of a person to certain drugs can be learned by empiricism only. It is true persons of light complexion are considered more susceptible to the effects of a mydriatic than brunettes. But such is not always the case. A black negro in our practice was crazed by four drops of a two-grain solution of atropine. Empiricism is a great teacher and blasts many theories.

Women in Medicine.

In an article on this subject (in the St. Louis *Nedical and Surgical Journal*) Dr. Abeken says:

"Woman is not fit for the practice of medicine!

"Many arguments have been advanced in contradiction of this—strong and weak arguments—the strong arguments generally with the secret stamp of masculine make on them; the weak ones—well, the weak ones without any stamp. It will be necessary to consider only the stamped ones.

"All of these strong arguments may be summarized in the one based on the alleged axiom, that equal duties convey equal rights. If a man perform all the duties of a citizen, he is entitled to the right of voting and of being voted for; therefore, if a woman perform the same duties, she is entitled to the

same rights. If a man have conscientiously performed the duties of a medical student, he is entitled to the privileges of a doctor of medicine; therefore, if a woman have performed the same duties, she is entitled to the same privileges. (Who does not recognize the secret stamp here, in spite of the flaw in the argument?) As far as the chain goes, every connecting link is perfect; but how about the initial link? What determines the right of the citizen or of the student to take upon himself the duties of citizenship or of study? Their mere ability and offer to perform these duties cannot confer this right.

"Thus man derived his right to citizenship and to the practice of medicine not merely from his ability, but from his inherent fitness for these duties, as shown by the fact that he himself has created the political and medical sciences. Have we any warrant that woman posses such fitness? Are we assured, that to train woman for political and medical work is not a waste of energy and a sin against the laws of nature?

"Everything in nature is the result of the influences bearing upon it. Man's fitness, his right for the work in question, is the result of the influences bearing on him in the place which he occupies in nature. Woman's place in nature, therefore, will determine whether her "fitness," her "rights" are equal to or different from those of her brother, man.

"Comparing the brains of different races, we find the sexual difference (in brains) decrease with the degree of civilization which a race possesses, until at its lowest stage, as with the remnants of certain eventually autochthonic races in Africa, races not quite extinguished by the immigration of the superior ones, the difference becomes almost imperceptible.

"Woman's present anatomy, then, shows clearly that her chief duty to-day is not the pursuit of knowledge, but the breeding and the rearing of the young. This has become to-day an arduous, important task, requiring a high order of skill and intelligence, as high as that of man, but of a different kind.

"There is with both sexes a general sentiment that certain pursuits of man are not fit for woman to actively enter upon; for instance, politics and medicine, though there is some controversy upon the subject.

"Closer scrutiny reveals that she lacks, at least, that one essential faculty, that mental momentum, that inexorable devotion to logic, that inventive power, which is necessary to prevent the sciences from becoming mere codes of dogmas and to render them as truly progressive as they should be.

"The causes of this modern craze, to push woman out of her proper sphere into that of man, need only to be understood to perceive that this movement is indeed a craze and not a legitimate step in evolution. It is a symptom of a morbid condition of society. Every age is apt to believe itself the end of one and the beginning of another epoch. But, guarding against this error, there is to-day apparent a general, international unrest of the masses, which seems to forbode an epochal upheaval, an epochal shaking up of the long-established order of things—not mere Coxeyism, not a mere civil war, nor a war between two nations, but a cataclysm like that which twice swept away a world's empire at Rome.

"Various causes—a defective system in producing, the 'grab as grab can' principle in the distribution of the wealth of nations—have brought to pass a concentration of the economic forces of the money power, which, in the hands of a few, threatens to become more tyrannical, because more secret and less easily understood, than ever was the concentration of political power in the hands of a Cæsar or a Louis XIV. Like every other disobedience of the laws of nature, this one also has engendered its own penalty and has developed a pestilence which punishes alike the guilt of commission in the few and the guilt of omission in the many. This modern pestilence, commercialism, threatens to blight the noblest aspirations of man, to pervert high-minded ambition to grasping greed, the healthy emulation of man to advance himself with his race to a sordid tussle for bread and wealth; in which man has become pitted not alone against man, but in which man is

forced into an unnatural competition with the inanimate creation of his own ingenuity, machinery, with the labor of his own children and with the labor of woman—his mother, his wife, his sisters, and his daughters.

"This is evidently the cause, but certainly not the justification, of woman appearing in the world's arena for men.

"There is only one code of just laws—it is the book of nature. Whenever man, whether as statesman, though inspired by sincere patriotism, whether as prophet, though sincerely convinced of his inspiration by some divinity, formulates laws which do not correctly interpret the laws of nature, injury has ever resulted in direct proportion to the error made. Therefore, let us, especially the doctors, the teachers of health and happiness, carefully study the laws of nature before we translate them into the human terms of laws and customs, and if we do this we shall read that the path of woman is parallel, but not the same as that of man; that woman is, indeed, the equal of man so far as the order of her gifts and the importance of her duties are concerned, but that her gifts and duties are not the same as those of man; that the efforts of woman are perfectly justifiable to make herself economically independent of man, so that she need not marry a man nor be compelled to persist in a mistake she may have made in the selection of a mate, for her food; but that the pursuits open for woman for this purpose are not those which require a life's devotion, which, like the practice of medicine, require study to become the chief occupation, but those which she may readily quit or resume as the vicissitudes of life divert her or not from her chief duty in nature, the guardianship of the future of our race. We shall read that woman is fit to bear in her womb, to nurse at her breasts, to teach at her knee, and to comfort in her home this promise of the future, because she is most fitted by nature to do so; but we shall also read that woman is not fit, because not most fitted, for the elaboration of the arts and the enlargement of the sciences, though she is entitled to the blessings of both; that woman is not fit for the dangerous experiments necessary to perfect 'the art of living together without fighting'—not fit for politics; and that, for the same reason, though there may be money in it, woman is not fit for the practice of medicine."

Splenectomy.

Dr. W. J. Conklin, in *Medical Record*, reports a successful case of splenectomy—a woman, aged 29 years, who had been subject to frequent attacks of chills and fever for a period of many years. There was a solid, freely movable tumor, sensitive to touch, in the left iliac region, which proved to be a displaced spleen about twice the normal size. The tumor was removed, and though there was very profound shock the patient recovered. She has gained very much in weight, and reports excellent health, with the exception of continuous drowsiness. The percentage of mortality in splenectomy from all causes is 45 per cent.

A PROMINENT Western surgeon was once called to attend a young gentleman, who had a badly lacerated scrotum. One testicle was somewhat injured, and was protruding from the wound. The surgeon was making preparations to remove the testicle, and while doing so learned that the young man was studying for the ministry. He immediately restored the testicle to its proper place and sewed up the wound. Actions sometimes speak louder than words.

TYPE setters often make some ludicrous blunders, especially with medical terms. Possibly it was the intense religious atmosphere of our office which influenced one of our printers to substitute "unbiblical hernia" for umbilical hernia.

The Association of American Medical Colleges.

The Omaha Clinic.

At a meeting held in San Francisco, Cal., June 7, 1894, the following resolutions were adopted by the association:

Resolved,, That colleges, members of this association, shall require of all matriculates an examination as follows:

1. An English composition in the handwriting of the applicant of not less than two hundred words; said composition to include construction, punctuation and spelling.

2. Arithmetic, Fundamental Rules, Common and Decimal Fractions and Ratio and Proportion.

3. Algebra—through Quadratics.

4. Physics—Elementary—Gage.

5. Latin—an amount equal to one year's study, as indicated in Harkness Latin reader.

[The above resolution does not apply to students exempt from the entrance examination, as per section 2, article III.]

Reeolved, That the following classes of students be recognized as entitled to apply for advanced standing in colleges members of this body:

(*a*) Such graduates of recognized colleges and universities as have completed the prescribed courses in Chemistry and Biology therein.

(*b*) Graduates and matriculates of colleges of Homeopathy, Eclecticism and Dental Colleges.

The Drinking Treatment for Typhoid.

The Canada Lancet.

Some years ago M. Debove recommended the use of large amounts of water internally in typhoid fever. "I make my patients drink," he said; and this was his chief special treatment. The object was to dilute the fluids of the system and wash out the toxines in the blood and intestinal canal. M. Lichteim adopted this treatment and reports nine successful cases. Recently, M. Maillart, of Geneva, has made an elaborate study of this mode of treatment, reporting fourteen cases in detail, of which one died (*Revue de Medicine*, November, 1893, and March, 1894). Maillart thinks that the water-drinking method should be "erected into a special method of treatment." In order to secure the proper results the patient must drink five or six litres (quarts) of water a day. There is no contra-indications for the use of water in this way, for it does not weaken the heart, but has rather the contrary effect. The results obtained are a progressive lowering of the fever, a disappearance of dryness of the mouth, a marked sedation of all the nervous symptoms, and an improvement in the action of the heart and kidneys. There is an abundant diuresis and an unusual increase in the perspiration. Urea is carried off in large amounts. The treatment does not shorten the course of the disease, but simply makes it milder and less fatal. Patients, we are told, take kindly to this method. The typhoid patient takes usually six to eight glasses of milk daily, and if to this are added ten to twelve glasses of water, the diluent effect should be very great.

The Minute Anatomy of the Fallopian Tubes.

Maryland Medical Journal.

Dr. Mary A. Dixon Jones contributes to the *American Journal of Obstetrics* an article on the minute anatomy of the Fallopian tubes, based on a ten years' microscopical study of normal and pathological tubes. She has long been convinced that a careful study of this anatomical structure would reveal a more complicated composition. The results of her researches may be summed up as follows:

1. In the tube wall are six layers of smooth muscles. The two main layers are the circular and the longitudinal. These interlace; the circular has the broader area and is nearer the caliber, the longitudinal is nearer the peritoneum.

2. The inner surface of the tube wall is

made up of myxomatous or myxofibrous connective tissue, which in turn is supplied with two muscle layers, a broader longitudinal and a narrow circular, both interlacing.

3. The mucosa has folds with many ramifications, serving for the occlusion of the caliber during life. These folds are the result of alternate contractions and extensions of the two muscle layers of the mucosa, the transverse and longitudinal, which are visible throughout all the folds and all the ramifications, arranged in bundles close beneath the epithelial layer.

4. Outside of the longitudinal layer of the tube wall is the layer of blood vessels, mainly arteries and veins, in an arrangement similar to that known to exist in the wall of the uterus.

5. Beyond the vascular layers are the two narrow layers of smooth muscle fibers, both being oblique, both traceable from the uterine ostium up to the fimbriated extremity of the tube, and they correspond to the two oblique layers of the wall of the uterus. The two oblique layers are bordered outwardly by the peritoneum, and seem to serve mainly for the regulation of the afflux of blood in the adjacent arteries and veins.

6. The circular and longitudinal muscle layers are antagonistic in their action. If one layer is contracted the other is relaxed. Again, the two muscle layers of the tube wall proper are antagonistic in their action to the muscles of the mucosa. Within the folds the primary, secondary, and tertiary ramifications are produced by alternate contractions of smaller portions of the muscle layers of the mucosa.

The Nervous Complications of Measles.

Medical Record, June 23, 1894.

At a recent meeting of the Royal Medical and Chirurgical Society, London, Dr. Dawson Williams drew attention to certain complications of measles and other infectious diseases which are apt to be extremely puzzling, and the nature of which has been but little understood; he took as his text a case in which, on the fourth day of an ordinary attack of measles, convulsions occurred followed by "unconsciousness," lasting ten days and leaving a condition of general paresis and loss of speech, with tremor and inco-ordination. A gradual improvement ultimately took place, but the patient was left in a state of intellectual backwardness, and preserving many of the symptoms of disseminated sclerosis, with a spastic condition of the lower limbs—a "false disseminated sclerosis due to measles." By reference to cases recorded by various observers in connection with other infectious diseases, it was shown that, possibly from the virulence of the poison during the onset of the malady, widespread lesions of the nervous system, principally originating in its vascular supply, were apt to occur, not only causing serious symptoms at the time, but doing permanent injury to innervation. The onset of coma and convulsions during the course of a febrile infectious disease should not then be looked upon as generally indicating any accurately localized mischief, such as hemorrhage; nor should consecutive tremors and pareses, discovered after cessation of more serious symptoms, be looked on as descending degenerations likely to end in atrophy and contracture; but the cerebral symptoms should be regarded as pointing to only a part, although the most demonstrative part, of a widespread implication of many areas in the nervous system, and it should be remembered that, the injury once done, a gradual recovery, the limits of which it is at present impossible to define, may slowly take place, separating these cases in a marked manner from those of the true muscular atrophy, or true disseminated sclerosis, the progress of which is usually in the opposite direction—a distinction worth remembering.

Two cases of orchitis were treated successfully with guaiacol by Balzer. It was applied externally in vaseline, six parts of the latter to one of the former.

Treatment of Mammary Abscess.

As practiced by Dr. Paul F. Munde—Richmond Journal of Practice.

After the presence of pus is determined it should be the duty of the surgeon to evacuate it as soon as possible. The incision should extend in a radiating direction from the nipple to the circumference, so as to avoid wounding the large blood vessels, or the lacteal ducts. The pus having been evacuated, the cavity should be washed out with a bichloride solution of moderate strength. A large, coarse bathing sponge having been procured, thoroughly cleansed of all impurities and sand, is then soaked in boiling water. The sponge should be large enough to cover the diseased breast, and its center cut out so as to make room for a large part of this organ. The sponge should be soaked in a hot 2 per cent. solution of carbolic acid, then rapidly squeezed, and placed over the breast, so as to leave the opening of the abscess projecting into the center of the sponge; over this is placed a piece of oil-silk and firmly pressed against the thorax by means of several turns of a roller bandage. The steady compression prevents the accumulation of pus and induces approximation of the walls of the abscess cavity. The sponge may have to be removed once or twice a day at first to be cleansed, but should then be reapplied immediately in the manner described. In his hands the closure of the abscess almost infallibly results in from four to six days.

Prohibitory Laws.

Dr. T. D. Crothers, in writing upon this subject in the *Quarterly Journal of Inebriety*, concludes as follows:

"To repeal all restrictive and prohibitory laws and open the doors for the free use of rum is to act in opposition to all the facts of observation and experience. On the other hand, to insist that prohibitory laws are the only measures to correct the drink evils, or that high license and local option are equally powerful as remedies, is to assume a knowledge of alcohol and inebriety that has not been attained. The highest wisdom of to-day demands the facts and reasons for the use of alcohol, and why it should be literally and theoretically the cause of so much loss and peril to the race. All hope for the future solution of these questions must come from accurately observed facts and their teachings, and, like the problems of the stars above us, be determined along lines of scientific inquiry."

THE catalogue of the Kansas Medical College has just been issued. It is a fine piece of workmanship. The cover is finely finished, glazed paper, and has on its back a half-tone engraving of the college building, and on the inside an engraving of a surgical clinic. The cover is printed in a photo-brown ink, giving a very pleasing effect.

I TAKE pleasure in recommending to the profession guaiacoline as prepared by the Kaw Pharmacy Co., Topeka, Kas., as an excellent preparation—a nutrient in la grippe and in all debilitative or pulmonary troubles. J. W. DONALDSON, M. D.

WILL some of our readers tell us the sensory nerves in which the irritation is seated in headache?

THE quantity of blood in the brain is computed to be one-fifth of the blood of the whole body.

KEEN says that in 80 per cent. of the cases of fistula in ano the patients are tuberculous.

Important Note on Dispensing Piperazine.

Besides knowing that Piperazine is a powerful uric acid solvent, which will combine with at least twelve times more uric acid than will lithium and forming a soluble urate salt while the urate of lithium is practically insoluble, and that Piperazine is therefore primarily indicated in all diseases due to uric acid diathesis, it is valuable alike to the physician who prescribes and to the pharmacist who dispenses, to note and remember the following:

1. Piperazine occurs in crystalline form, but it is a hygroscopic body and will deliquesce on exposure to air; hence

2. Piperazine must never be dispensed in powder form, pills, tablets, capsules, or any other similar form.

3. Piperazine is supplied by the manufacturer in one size vial only, containing five grammes (75 grains), or sufficient for five days' dosage; therefore it is practical, economical and preferable that

4. Piperazine should be prescribed thus

℞ Piperazin. pur. (Schering..grm. v
Solve in
Aquae..... ℥ v

Sig. Dissolve one-fifth of this solution each day in one pint or one quart of water, keep the solution in a warm place (neither hot nor cold), and drink the full quantity during the day in convenient doses to quench the thirst.

If it is desired to combine phenocoll with piperazine, the two remedies must be dissolved separately, 15 grains of each in ½ to 1 pint of water, and when completely dissolved the two solutions may be poured together. If otherwise prepared it is likely that a spongy sediment will form, which cannot subsequently be dissolved (except by heat, which is not advisable). In making these solutions pure water can be used, or carbonated water; some pharmacists prefer to employ pure water and soda water from the fountain equal parts, first making the solutions with pure water to one-half the volume and then adding the soda water.

The points above advanced are important as assuring proper and economical administration and the best chances for satisfactory therapeutic effect.

DR. HURLEY, of Washington writes us: I tried chloralamid personally, and am very much pleased with the result. I am greatly troubled with insomnia resulting from nervousness, and following directions I mixed a 15 grain dose of it with a small quantity of brandy, and in about a half hour I dropped off into a natural sleep; I awoke the next morning just as though I had taken no hypnotic, instead of having that malaise feeling that other hypnotics give me. I think in chloralamid the medical profession has a valuable possession.

DR. SQUIBB has made a number of tests of the different brands of chloroform in the American market. He finds some impure, but none very bad, and he thinks that American chloroform is, on the whole, purer than that used in Europe.

THE Boylston Medical Prize for 1894 has been awarded to Dr. Norman Walker, of Edinburgh, Scotland, for an essay entitled "The Histological Varieties of Cutaneous Cancer.

DR. MONTGOMERY declares that pain in the inguinal region, occurring before menstruation, is evidence of diseased condition of the ovaries.

PROF. CZERNY is reported to have refused to be made professor of surgery at Vienna because of the inadequacy of the laboratory equipment of the hospital.